

ABSTRACT

A modular patient care system having a central management unit module and one or more detachable functional units is described. Using unique mechanical and electrical features, the modular patient care system is capable of flexibly, bilaterally, and safely providing electrical power from the central management unit to the attached functional units, with exposed power leads of end units being electrically isolated for safety and security. Functional units are capable of detecting the presence of other functional units more distant from the central management unit for passing power to those units, and for otherwise electrically isolating exposed power leads when no further units are attached. Additionally, the modular patient care system provides for a modular connection arrangement wherein modules are detachably connected to each other in a convenient, flexible, interchangeable, and secure manner by providing a hinge connector pair, a specially located latch mechanism, and a guide means between any pair of modules.